

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (original): A method for producing a stabilized fluoropolymer which comprises producing said stabilized fluoropolymer by subjecting a treatment target substance containing a sulfonic-acid-derived-group-containing fluoropolymer to a fluorination treatment, wherein said sulfonic-acid-derived-group-containing fluoropolymer is a fluoropolymer containing  $-\text{SO}_3\text{M}$  (in which M represents H,  $\text{NR}^1\text{R}^2\text{R}^3\text{R}^4$  or  $\text{M}^1_{1/\text{L}}$ ;  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$  and  $\text{R}^4$  are the same or different and each represents H or an alkyl group containing 1 to 4 carbon atoms; and  $\text{M}^1$  represents an L-valent metal), and said treatment target substance has a moisture content of not higher than 500 ppm by mass.

2. (original): The method for producing a stabilized fluoropolymer according to Claim 1, wherein the sulfonic-acid-derived-group-containing fluoropolymer further contains  $-\text{SO}_2\text{X}$  and/or  $-\text{COZ}$  (wherein X represents F, Cl, Br, I or  $-\text{NR}^5\text{R}^6$  and Z represents  $-\text{NR}^7\text{R}^8$  or  $-\text{OR}^9$ ;  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$  and  $\text{R}^8$  are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group and  $\text{R}^9$  represents an alkyl group containing 1 to 4 carbon atoms).

3. (currently amended): The method for producing a stabilized fluoropolymer according to Claim 1 ~~or 2~~,

wherein the sulfonic-acid-derived-group-containing fluoropolymer further contains –COOH at the polymer chain terminus or termini.

4. (currently amended): The method for producing a stabilized fluoropolymer according to Claim 1, ~~2 or 3~~,  
wherein the fluorination treatment is carried out using a gaseous fluorinating agent comprising a fluorine source,  
said fluorine source is at least one species selected from the group consisting of F<sub>2</sub>, SF<sub>4</sub>, IF<sub>5</sub>, NF<sub>3</sub>, PF<sub>5</sub>, ClF and ClF<sub>3</sub> and  
said fluorine source amounts to not less than 1% by volume of said gaseous fluorinating agent.

5. (original): The method for producing a stabilized fluoropolymer according to Claim 4, wherein the fluorine source is F<sub>2</sub>.

6. (currently amended): The method for producing a stabilized fluoropolymer according to Claim 1, ~~2, 3, 4 or 5~~,  
wherein the sulfonic-acid-derived-group-containing fluoropolymer is a copolymer which is at least binary comprising  
an acid-derived group-containing perhalovinyl ether represented by the general formula (I):  
$$\text{CF}_2=\text{CF}-\text{O}-(\text{CF}_2\text{CFY}^1-\text{O})_n-(\text{CFY}^2)_m-\text{A} \quad (\text{I})$$
  
(wherein Y<sup>1</sup> represents F, Cl, Br, I or a perfluoroalkyl group, n represents an integer of 0 to 3; n atoms/groups of Y<sup>1</sup> are the same or different; Y<sup>2</sup> represents F, Cl, Br or I; m represents an integer

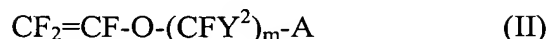
of 1 to 5; when m is an integer of 2 to 5, m atoms of  $Y^2$  are the same or different; A represents  $-SO_2X$  or  $-COZ$ ; X represents F, Cl, Br, I or  $-NR^5R^6$  and Z represents  $-NR^7R^8$  or  $-OR^9$ ;  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group and  $R^9$  represents an alkyl group containing 1 to 4 carbon atoms) and

a copolymerizable monomer with said acid-derived group-containing perhalovinyl ether, said copolymerizable monomer is an "other vinyl ether" other than said acid-derived group-containing perhalovinyl ether and an ethylenic monomer, said copolymer comprises 5 to 40 mole percent of an acid-derived group-containing perhalovinyl ether unit derived from said acid-derived group-containing perhalovinyl ether, 60 to 95 mole percent of an ethylenic monomer unit derived from said ethylenic monomer and 0 to 5 mole percent of an "other vinyl ether unit" derived from said "other vinyl ether".

7. (original): The method for producing a stabilized fluoropolymer according to Claim 6, wherein n is 0 (zero).

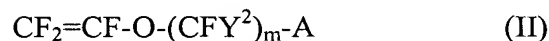
8. (currently amended): The method for producing a stabilized fluoropolymer according to Claim 6 ~~or 7~~, wherein  $Y^2$  is F and m is 2.

9. (original): A stabilized fluoropolymer obtained via polymerization of an acid-derived group-containing perhalovinyl ether represented by the general formula (II):



(wherein  $\text{Y}^2$  represents F, Cl, Br or I,  $m$  represents an integer of 1 to 5; when  $m$  is an integer of 2 to 5,  $m$  atoms of  $\text{Y}^2$  are the same or different; and A represents  $-\text{SO}_2\text{X}$  or  $-\text{COZ}$ ; X represents F, Cl, Br, I or  $-\text{NR}^5\text{R}^6$  and Z represents  $-\text{NR}^7\text{R}^8$  or  $-\text{OR}^9$ ;  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$  and  $\text{R}^8$  are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group and  $\text{R}^9$  represents an alkyl group containing 1 to 4 carbon atoms), and tetrafluoroethylene, wherein said stabilized fluoropolymer shows an intensity ratio  $[x/y]$  between carboxyl group-due peak  $[x]$  and  $-\text{CF}_2-$  due peak  $[y]$  of not higher than 0.05 in IR measurement.

10. (original): A stabilized fluoropolymer obtained via polymerization of an acid-derived group-containing perhalovinyl ether represented by the general formula (II):



(wherein  $\text{Y}^2$  represents F, Cl, Br or I,  $m$  represents an integer of 1 to 5; when  $m$  is an integer of 2 to 5,  $m$  atoms of  $\text{Y}^2$  are the same or different; and A represents  $-\text{SO}_2\text{X}$  or  $-\text{COZ}$ ; X represents F, Cl, Br, I or  $-\text{NR}^5\text{R}^6$  and Z represents  $-\text{NR}^7\text{R}^8$  or  $-\text{OR}^9$ ;  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$  and  $\text{R}^8$  are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group and  $\text{R}^9$  represents an alkyl group containing 1 to 4 carbon atoms) and tetrafluoroethylene, wherein, in a hydrolyzate of said stabilized fluoropolymer, the number  $[X]$  of main chain terminal  $-\text{CF}_3$  groups per  $1 \times 10^5$  main chain carbon atoms of said hydrolyzate is not smaller than 10 as calculated using an integrated intensity due to main chain terminal  $-\text{CF}_3$  groups and an integrated intensity due to  $-\text{CF}_2-$  adjacent to an ether bond in side chains branched from the main chain in said hydrolyzate, each determined by solid state  $^{19}\text{F}$  nuclear magnetic resonance

spectrometry of said hydrolyzate in a state swollen in an oxygen-containing hydrocarbon compound having a dielectric constant of not lower than 5.0 and further using an ion exchange equivalent weight Ew value determined by titrimetric method.

11. (original): The stabilized fluoropolymer according to Claim 10, wherein said fluoropolymer further shows an intensity ratio [x/y] between carboxyl group-due peak [x] and -CF<sub>2</sub>- due peak [y] of not higher than 0.05 in IR measurement.

12. (currently amended): The stabilized fluoropolymer according to Claim 9, ~~10 or 11~~, wherein the polymerization of the acid-derived group-containing perhalovinyl ether and tetrafluoroethylene is carried out in the manner of emulsion polymerization.

13. (currently amended): The stabilized fluoropolymer according to Claim 9, ~~10, 11 or 12~~, which is obtained by the method ~~for producing a stabilized fluoropolymer~~ according to Claim 7.

14. (currently amended): A stabilized fluoropolymer, which is obtained by the method for producing a stabilized fluoropolymer according to ~~Claim 1, 2, 3, 4, 5, 6, 7 or 8~~Claim 1.

15. (currently amended): The stabilized fluoropolymer according to Claim 9, ~~10, 11, 12, 13 or 14~~,

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which has a melt index of 0.1 to 20 g/10 minutes as measured under the conditions of 270°C and a load of 2.16 kg according to JIS K 7210.

16. (currently amended): A polymer electrolyte membrane,  
which contains a hydrolyzate of the stabilized fluoropolymer according to Claim 9, ~~10, 11, 12,~~  
~~13, 14 or 15.~~

17. (original): The polymer electrolyte membrane according to Claim 16,  
wherein the amount of fluoride ion eluted by Fenton treatment comprising immersing **b** grams of  
said polymer electrolyte membrane in **a** liters of an aqueous hydrogen peroxide solution having  
an initial iron(II) cation concentration of 2 ppm and an initial hydrogen peroxide concentration of  
1% by mass at a membrane/bath ratio [b/a] of 3.2 and maintaining the whole at 80°C for 2 hours  
is not greater than  $11 \times 10^{-4}$  parts by mass per 100 parts by mass of said polymer electrolyte  
membrane.

18. (currently amended): An active substance-immobilized material which comprises a  
hydrolyzate of the stabilized fluoropolymer according to Claim 9, ~~10, 11, 12, 13, 14 or 15~~ and an  
active substance.

19. (original): The active substance-immobilized material according to Claim 18,  
wherein the active substance is a catalyst.

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20. (original): The active substance-immobilized material according to Claim 19, wherein the catalyst is a platinum-containing metal.

21. (currently amended): A membrane/electrode assembly comprising a polymer electrolyte membrane and an electrode, wherein said membrane/electrode assembly satisfies at least one condition selected from the group consisting of the conditions (1) and (2) given below:

(1) said polymer electrolyte membrane is the polymer electrolyte membrane according to Claim 16-~~or~~17, and

(2) said electrode is the active substance-immobilized material according to Claim 18,~~19~~~~or~~20.

22. (original): A solid polymer electrolyte fuel cell which comprises the membrane/electrode assembly according to Claim 21.